

REMARKS

I. 35 U.S.C. §103 - Nevins and Park and Kodama Claims 1, 3, 5-9, 11-13, and 17-18

Nevins sets microphone volume levels. In Nevins, a speech recognition system executes microphone test software. The test software initially prompts the user to speak the test phrase "Testing Microphone." The test software may re-prompt the user to speak the test phrase, each time checking for adequate volume level. (Col. 4, lines 29-31, 45-53, Figure 2a).

The test software executes in response to either of two discrete events. The first event is the addition of a new user to the speech recognition system. At that time, the test software determines if microphone volume is adequate. (Col. 4, lines 24-44). The second event is explicit user instruction to execute the test software. (Col. 6, lines 49-63). Accordingly, Nevins does not provide continuous feedback and Assignee respectfully disagrees with the assertion in the office action that Nevins "inherently" does so. As explained above, Nevins sets the volume level based on discrete events, and cannot be said to inherently provide continuous feedback.

Kodama is directed to a portable information gathering device. The office action asserts that Kodama discloses monitoring the on/off state of a microphone for a user. Assignee respectfully disagrees. Kodama discloses that a voice input button has an on/off state. (Col. 5, lines 56-61). To capture voice data, the user presses the voice input button and speaks into the microphone. (Col. 6, lines 34-49). Kodama does not monitor the on/off state of the microphone; instead, Kodama simply captures sound through the microphone when voice input button is pressed.

Accordingly, even assuming that there is motivation to combine Nevins, Park, and Kodama, the resulting Nevins-Park-Kodama speech processing system does not teach or suggest the subject matter present in claims 1, 3, 5-9, 11-13, or 17-18. The Nevins-Park-Kodama system sets the volume level of a microphone that provides input to a speech processing system for a portable data gathering device. The Nevins-Park-Kodama system obtains time samples of the microphone input, $d(k)$, only when the user presses a voice input button, and also obtains time samples from a secondary

correlated sensor, $x(k)$. Analog to digital converters generate the time samples. (Col. 4, lines 22-36, Figure 1). An adaptive filter processes $d(k)$ and $x(k)$ to obtain an enhanced time series speech signal $y(k)$. (Col. 4, lines 56-63).

The Nevins-Park-Kodama system does not provide continuous feedback of microphone on/off state. Nor does the Nevins-Park-Kodama system calculate frequency domain parameters that reflect information about microphone placement. Instead, the Nevins-Park-Kodama system generates a time series speech signal $y(k)$ from two other time series signals $d(k)$ and $x(k)$ when a voice input button is pressed. The Nevins-Park-Kodama system does not teach or suggest the subject matter found in claims, and the Assignee respectfully requests withdrawal of the §103 rejection.

II. 35 U.S.C. §103 - Nevins and Kodama

Claims 2, 4, and 14-15

Even assuming that there is motivation to combine Nevins and Kodama, the resulting Nevins-Kodama speech processing system does not teach or suggest the subject matter present in claims 2, 4, and 14-15. The Nevins-Kodama system sets the volume level of a microphone that provides input to a speech processing system when the user presses a voice input button. The Nevins-Kodama system captures sound using the microphone, amplifier, and analog to digital converter in response to the voice input button. However, the Nevins-Kodama system does not provide continuous feedback of microphone on/off state to the user by comparing an input signal to a threshold. Because the Nevins-Kodama system does not teach or suggest the subject matter found in claims, the Assignee respectfully requests withdrawal of the §103 rejection.

III. 35 U.S.C. §103 - Nevins and Kodama and Anderson

Claims 10 and 16

The Assignee respectfully submits that, even if there were a motivation to combine Nevins and Kodama and Anderson, the resulting system still would not disclose or suggest the subject matter of claims 10 and 16. The Nevins-Kodama-Anderson system is a portable information gathering device that tests the microphone volume level when a voice input button is pressed. The system also measures RMS

values of audio samples only to determine whether sound activity is occurring. The RMS values are compared to a threshold C3. If the RMS value exceeds C3, then sound activity is present. (Anderson, Col. 30, lines 33-49). Thus, the combined system does not determine whether the microphone is on or off based on the RMS value, but only whether sound activity is present at an already active microphone. The Assignee respectfully requests withdrawal of the rejection of claims 10 and 16 in view of Nevins and Kodama and Anderson

SUMMARY

Alone or in the asserted combinations, Nevins, Bakis, Kodama, and/or Anderson fail to teach or suggest the claimed subject matter. The Assignee therefore respectfully requests prompt allowance of the claims, now pending for almost five years. The Assignee also respectfully request confirmation from the Examiner of entry of the amendment to the Title presented in this response. The Examiner is invited to call the undersigned attorney for the Assignee via telephone if the Examiner has any questions, comments, or concerns, or if a telephone conference would expedite examination of this application.

Respectfully submitted,



John F. Nethery
Registration No. 42,928
Attorney for Assignee

BRINKS HOFER GILSON & LIONE
P.O. BOX 10395
CHICAGO, ILLINOIS 60610
(312) 321-4200